Office-Supreme Court, U.S.
FILED
MAY 18 1981
ALEXANDER L. STEVAS,
CLERK

No. 80-1939

IN THE

Supreme Court of the United States

OCTOBER TERM, 1980

North Carolina Natural Gas Corporation,
Public Service Company of North Carolina, Inc.
Piedmont Natural Gas Company, Inc.,
Petitioners,

v.

The Public Service Commission of the State of New York,
Long Island Lighting Company,
The Brooklyn Union Gas Company, *et al.*,
Respondents.

APPENDIX TO PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

Donald W. McCoy, Esquire
McCoy, Weaver, Wiggins,
Cleveland & Raper
P.O. Box 2129
Fayetteville, N.C. 28302

F. Kent Burns, Esquire
Boyce, Morgan, Mitchell, Burns & Smith, P.A.
P.O. Box 1406
Raleigh, N.C. 27602

Gregory Grady
Littman, Richter, Wright
& Talisman, P.C.
1050 17th Street, N.W., Suite 600
Washington, D.C. 20036
(202) 331-1194

Jerry W. Amos, Esquire
Brooks, Pierce, McLendon,
Humphrey & Leonard
P.O. Drawer U
Greensboro, N.C. 27402

Attorneys for
North Carolina Natural Gas Corporation,
Public Service Company of North Carolina, Inc.
and Piedmont Natural Gas Company, Inc.

DI CESARE - Printing — 331-6101 — Washington, D.C. 20006

INDEX TO APPENDIX

	Page
APPENDIX A	1
APPENDIX B	34
APPENDIX C	54
APPENDIX D	57
APPENDIX E	60
APPENDIX F	64

Notice: This opinion is subject to formal revision before publication in the Federal Reporter or U.S.App.D.C. Reports. Users are requested to notify the Clerk of any formal errors in order that corrections may be made before the bound volumes go to press.

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

United States Court of Appeals
for the District of Columbia Circuit

Original

No. 79-2182 FILED SEP 24 1980

THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK, PETITIONER

GEORGE A. FISHER
CLERK

v.

FEDERAL ENERGY REGULATORY COMMISSION, RESPONDENT

COMMONWEALTH GAS PIPELINE CORP.,
CAROLINA PIPELINE CORPORATION,
TRANSCONTINENTAL GAS PIPE LINE CORPORATION,
INTERVENORS

No. 79-2183

NORTH CAROLINA NATURAL GAS CORPORATION
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
PIEDMONT NATURAL GAS COMPANY, INC., PETITIONERS

v.

FEDERAL ENERGY REGULATORY COMMISSION, RESPONDENT

Bills of costs must be filed within 14 days after entry of judgment. The court looks with disfavor upon motions to file bills of costs out of time.

CAROLINA PIPELINE COMPANY,
COMMONWEALTH GAS PIPELINE CORPORATION,
PUBLIC SERVICE COMMISSION OF THE
STATE OF NEW YORK,
TRANSCONTINENTAL GAS PIPE LINE CORP.,
BROOKLYN UNION GAS CO., *et al.*,
COLUMBIA GAS TRANSMISSION CORP.,
WASHINGTON GAS LIGHT COMPANY,
ATLANTA GAS LIGHT COMPANY, INTERVENORS

No. 79-2184

NORTH CAROLINA UTILITIES COMMISSION, PETITIONER

v.

FEDERAL ENERGY REGULATORY COMMISSION, RESPONDENT

CAROLINA PIPELINE COMPANY,
COMMONWEALTH GAS PIPELINE CORPORATION,
PUBLIC SERVICE COMMISSION OF THE
STATE OF NEW YORK,
TRANSCONTINENTAL GAS PIPE LINE CORP.,
BROOKLYN UNION GAS CO., *et al.*,
COLUMBIA GAS TRANSMISSION CORP.,
WASHINGTON GAS LIGHT COMPANY,
ATLANTA GAS LIGHT COMPANY,
NORTH CAROLINA NATURAL GAS CORP., *et al.*,
INTERVENORS

No. 79-2195

LONG ISLAND LIGHTING COMPANY, PETITIONER

v.

FEDERAL ENERGY REGULATORY COMMISSION, RESPONDENT

TRANSCONTINENTAL GAS PIPE LINE CORP.,
NORTH CAROLINA NATURAL GAS CORP., *et al.*,
NORTH CAROLINA UTILITIES COMMISSION,
CAROLINA PIPELINE COMPANY,
COMMONWEALTH GAS PIPELINE CORPORATION,
PUBLIC SERVICE COMMISSION OF THE
STATE OF NEW YORK,
BROOKLYN UNION GAS COMPANY, *et al.*,
WASHINGTON GAS LIGHT COMPANY,
ATLANTA GAS LIGHT COMPANY, INTERVENORS

No. 79-2213

THE BROOKLYN UNION GAS COMPANY, *et al.*, PETITIONERS

v.

FEDERAL ENERGY REGULATORY COMMISSION, RESPONDENT

TRANSCONTINENTAL GAS PIPE LINE CORP.,
PUBLIC SERVICE COMMISSION OF THE
STATE OF NEW YORK,
COMMONWEALTH GAS PIPELINE CORPORATION,
NORTH CAROLINA NATURAL GAS CORP., *et al.*,
NORTH CAROLINA UTILITIES COMMISSION,
WASHINGTON GAS LIGHT COMPANY,
ATLANTA GAS LIGHT COMPANY, INTERVENORS

No. 79-2322

TRANSCONTINENTAL GAS PIPE LINE CORPORATION, PETITIONER

v.

FEDERAL ENERGY REGULATORY COMMISSION, RESPONDENTS

CAROLINA PIPELINE COMPANY,
NORTH CAROLINA NATURAL GAS CORP., *et al.*,
BROOKLYN UNION GAS COMPANY, *et al.*, INTERVENORS

Petition for Review of an Order of the
Federal Energy Regulatory Commission

Argued April 10, 1980

Decided September 24, 1980

Joseph P. Stevens with whom *Michael W. Hall* and *Steven L. Zilkowitz* were on the brief, for The Brooklyn Union Gas Co., et al., petitioners in No. 79-2213 and Intervenors in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2322.

Richard A. Solomon with whom *Peter H. Schiff*, General Counsel, Public Service Commission of the State of New York, and *Dennis Lane* were on the brief, for Public Service Commission of the State of New York, petitioner in No. 79-2182 and Intervenors in Nos. 79-2183, 79-2184, 79-2195, 79-2213 and 79-2322.

Morton L. Simons with whom *Barbara M. Simons* was on the brief for North Carolina Utilities Commission,

petitioners in No. 79-2184 and Intervenor in Nos. 79-2195 and 79-2213.

Thomas F. Ryan, Jr., with whom *Richard T. Boone* and *David J. Evans* were on the brief, for Transcontinental Gas Pipe Line Corp., petitioners in No. 79-2322 and Intervenors in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2213.

Gregory Grady with whom *Donald W. McCoy* and *F. Kent Burns* were on the brief, for North Carolina Natural Gas Corp., et al., petitioners in No. 79-2183 and Intervenors in Nos. 79-2184, 79-2195, 79-2213 and 79-2322.

Barbara J. Weller, Attorney, Federal Energy Regulatory Commission with whom *Jerome Nelson*, Solicitor, *Joshua Z. Rokach* and *Andrew M. Zack*, Attorneys, Federal Energy Regulatory Commission were on the brief, for respondent. *Howard Shapiro*, Attorney, Federal Energy Regulatory Commission also entered an appearance for respondent.

William I. Harkaway and *G. Douglas Essy* were on the brief, for Consolidated Edison Company of New York, Inc., petitioner in No. 79-2213 and Intervenors in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2322.

Francis J. McShalley was on the brief, for National Fuel Gas Supply Corp., petitioner in No. 79-2213 and Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2322.

John T. Miller, Jr. was on the brief, for Elizabeth Gas Company, petitioner in No. 79-2213 and Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2322.

Ira G. Megdal was on the brief, for South Jersey Gas Company, petitioner in No. 79-2213 and Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2322.

William R. Duff was on the brief, for Public Service and Gas Co., petitioner in No. 79-2213 and Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2322.

Eugene J. Bradley, Associate Attorney General, was on the brief, for Philadelphia Electric Co., petitioner in No. 79-2213 and Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2322.

Robert C. Richards was on the brief, for Long Island Lighting Co., petitioner in No. 79-2195 and Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2213 and 79-2322.

John E. Holtzinger, Jr., *Paul H. Kick* and *John T. Stough, Jr.* were on the brief, for Atlanta Gas Light Co., Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2213.

Stephen J. Small, *John M. Hill* and *Giles D.H. Snyder* were on the brief, for Columbia Gas Transmission Corp., Intervenor in Nos. 79-2183 and 79-2184.

Stanley M. Morly also entered an appearance for Carolina Pipeline Company, Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2322.

Stephen H. Wants, II also entered an appearance for Commonwealth Gas Pipeline Corp., Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2213.

Lewis Carroll also entered an appearance for Washington Gas Light Co., Intervenor in Nos. 79-2182, 79-2183, 79-2184, 79-2195 and 79-2213.

Before MCGOWAN, WILKEY and WALD, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* MCGOWAN.

MCGOWAN, *Circuit Judge*: These direct review proceedings under the Natural Gas Act involve two separate orders entered by the Federal Energy Regulatory Commission (FERC)—the successor agency to the Federal Power Commission (FPC), 42 U.S.C. § 7172(a)(1)(C).

One of those orders, reflecting the Commission's consideration of rate increases filed in 1976 by Transcontinental Gas Pipe Line Corporation (Transco) with the FPC under section 4 of the Act, is challenged in respect of the 14% rate of return on equity allowed by it. The other order, entered by the Commission after a hearing initiated by it under section 5(a) of the Act, is attacked, on both procedural and substantive grounds, for its imposition of a new basis for allocating Transco's costs attributable to distance. For the reasons appearing hereinafter, we affirm with respect to the rate of return issue, but set aside the second order relating to cost allocation.[1]

I

Transco operates a major long-line natural gas pipeline system running from its sources of supply in Texas and Louisiana through the southern and mid-Atlantic states to its terminus in the New York metropolitan area. Its service territory is divided into three sales rate zones: Mississippi, Alabama, and Georgia are in zone 1, the Carolinas, Virginia, and the District of Columbia in zone 2, and Maryland, Delaware, Pennsylvania, New Jersey, and New York in zone 3.

A 1962 settlement between Transco and its customers provided that customers in zone 2 would pay 2.8 cents

---

[1] Six separate petitions for review were filed, and have been consolidated by the court for hearing and disposition. In No. 79-2322, Transco has appealed the rate of return determination of the Commission as too low, whereas North Carolina Utilities Commission (NCUC) in its petition in No. 79-2184 asserts that it is too high. In No. 79-2182, the New York Public Service Commission (NYPSC) challenged FERC's cost allocation determination; and several North Carolina utilities in No. 79-2183, NCUC in No. 79-2184, Long Island Lighting Company (LILCO) in No. 79-2195, and a group of eight utilities in Pennsylvania, New Jersey and New York in No. 79-2213, have also petitioned for review of that decision.

per thousand cubic feet (Mcf) more than zone 1 customers, and that zone 3 customers would pay 3.6 cents per Mcf more than zone 2 customers. The 1962 settlement and subsequent rate settlements incorporating these cost allocations were approved by the FPC, and the rate differentials have been embodied in Transco's legally effective rate schedules.

On July 30, 1976, Transco filed with the FPC an application for $81.3 million in higher rates (Docket RP76-136). On December 30, 1976, Transco, in Docket RP77-26, proposed an increase in interruptible service rates. No change in the zone rate differentials was proposed by Transco in either of these filings. The FPC consolidated the two petitions. The parties were able to reach a partial settlement on issues not contested here that was approved by the Commission on June 27, 1978.[2] During the interim, Transco has applied for new rates to take effect on January 1, 1978. This meant that Transco's 1976 request for a higher rate of return was limited, or locked in, to the eleven months between February 1 and December 31, 1977.[3]

After a hearing, a FERC administrative law judge issued an initial opinion establishing 14% as a reasonable rate of return on Transco's equity for the locked-in period.[4] The opinion also stated that the zone of reasonableness for this rate lay between 13.5 and 14.3%.[5]

---

[2] *Order Granting in Part Motion for Reconsideration, Accepting Settlement Agreement in Part, and Remanding for Procedures on Contested Zoning Issue*, Docket Nos. RP76-136 and RP77-26 (June 27, 1978), *reprinted in* Record at 4133-35.

[3] The cost allocation issue, however, is unaffected by the later filing.

[4] *Initial Decision on Reserved Issues*, Docket Nos. RP76-136 and RP77-26 (Feb. 13, 1978), *reprinted in* Record at 3937-49 [hereinafter referred to as *Initial Decision*].

[5] *Id.* at 9-10.

This initial opinion was adopted by the Commission on August 30, 1979.[8] The ALJ relied heavily upon testimony of the Commission's expert witness, who compared Transco's risks and rate of return to those of similar investments such as other pipelines and electric utilities. Record at 160-68. Transco's witness also compared Transco to such investments, but suggested that the Commission's witness had underestimated the risks facing Transco and concluded that from 16½% to 17% would be a more reasonable rate of return. Record at 29-42, 45-51, 473.

Although Transco had not proposed any change in the 1962 zone allocations, the parties found themselves unable to agree on a method of cost allocation during settlement negotiations. Accordingly, the Commission, confronted with a claim that no change in the existing zone differentials could be made in the absence of a finding under section 5(a) of the Act that they were unlawful, ordered a hearing on this question, and, on December 19, 1978, an administrative law judge handed down an

---

[8] *Order Affirming and Adopting Initial Decision*, Docket Nos. RP76-136 and RP77-26 (Aug. 30, 1979), *reprinted in* Record at 4728A. The Commission slightly modified this order by changing the amount of interest Transco was to pay on refunds, *Order Amending Prior Order*, Docket Nos. RP76-136 and RP77-26 (Sept. 27, 1979), *reprinted in* Record at 4829-30.

The refunds were ordered because Transco has been charging rates based upon its requested 17% return on equity. Under the Natural Gas Act, a petitioning company may put into effect its requested rates subject to refund, although FERC may suspend the higher rate for up to five months. Natural Gas Act § 4(d), (e), 15 U.S.C. § 717c(d), (e) (1976). *See* note 13 *infra*.

FERC denied rehearing on the rate of return issue. *Notice of Denial of Application for Rehearing and Motion for Stay*, Docket Nos. RP76-136 and RP77-26 (Oct. 24, 1979), *reprinted in* Record at 4889.

initial decision endorsing the 1962 zone differentials.[7] However, in Opinion No. 59,[8] the Commission rejected the decision and, without having found the existing differentials to be unlawful, ordered cost allocation not by zones but by the Mcf-mile method, which attributes cost according to volume and mileage. The change from zones to Mcf-mile would transfer about $15 million in fixed costs from customers in zones 1 and 2 to those in zone 3.[9]

The Commission justified its decision by reference to *Northern Natural Gas Co.*, 14 FPC 11 (1955), *aff'd sub. nom. Interstate Power Co. v. FPC*, 230 F.2d 372 (8th Cir. 1956), *cert. denied*, 352 U.S. 967 (1957), where it concluded that distance was the prime determinant of the cost of transporting natural gas.[10] Having decided on that basis that the Mcf-mile method was superior to zone allocations, the Commission then considered whether the cost-shifting effects of the Mcf-mile system should be mitigated because of (1) the historical basis of the Transco system, (2) load concentration and

---

[7] *Initial Decision on Zone Rate Differentials*, Docket Nos. RP76-136 and RP77-26 (Dec. 19, 1978), *reprinted in* Record at 4468-75.

[8] Opinion No. 59, *Opinion and Order Reversing Initial Decision and Establishing Zone Rates Based Upon Fully Allocated Costs*. Docket Nos. RP76-136 and RP77-26 (Aug. 6, 1979), *reprinted in* Record at 4706-28 [hereinafter referred to as Opinion No. 59]. The Commission denied a motion for rehearing on this issue, *Notice of Denial of Application for Rehearing and Motions for Stay*, Docket Nos. RP76-136 and RP77-26 (Oct. 4, 1979), *reprinted in* Record at 4869.

[9] Opinion No. 59 at 19.

[10] *Id.* at 5-6.

It is perhaps worth noting that this conclusion led the FPC, in *Northern Natural Gas*, to allocate costs not by the Mcf-mile method, but by zones. 14 FPC at 36. The Northern Natural Gas system had formerly not allocated costs by distance. *Id.* at 20. *See* section III, B *infra*.

load factor in zone 3, and (3) storage facilities in zone 3 which benefit zone 2 consumers. NYPSC and the zone 3 customers had argued that these factors militated against using the Mcf-mile method.

These parties contend that cost allocations on the Transco system should reflect the fact that the pipeline was built thirty years ago to serve customers in zone 3 and that it would not have been built when it was without those customers. The FERC staff recommended, on this ground, to calculate costs half on the zone method, more favorable to zone 3, and half on the Mcf-mile method. Opinion No. 59 at 7.

The Commission chose not to mitigate the 100% mileage cost allocation on this ground because it found that the capacity of the pipeline had increased by a factor of eight or nine since its construction and therefore the historical roots of the Transco system were of little contemporary relevance. *Id.* at 7. It also commented that it could not impose costs on zone 1 and 2 customers because of factors unrelated to cost. Finally, the Commission observed that the price increase attributable to mileaging in zone 3 would not render Transco's gas less saleable. *Id.* at 8-9.

The zone 3 interests also argued that considerations of load concentration and load factor in their zone should be used to lessen the effect of Mcf-mile cost allocation. The pipeline's ratio of sales in zone 3 to total sales, or load concentration, was 75%, indicating that zone 3 customers accounted for ¾ of Transco's sales. A high load concentration in zone 3 suggests that the pipeline's economies of scale, such as the use of larger-diameter pipe, are largely attributable to zone 3 customers. These customers argued that they should receive the benefit of costs avoided mostly through their use of the Transco pipeline. But the Commission declined to modify the Mcf-mile method, stating that all zones contribute to

economies of scale on the Transco system. Opinion No. 59 at 15.

The Commission likewise did not give any weight to the heavier load factor in zone 3. The load factor, which is the ratio of average daily demand to maximum daily demand,[11] was 52% in zone 3, compared to 50% in zone 1 and 36% in zone 2. Opinion No. 59 at 9 n.13. A higher load factor suggests a more efficient use of resources, an effect that one expert source states is "quite pronounced" [12] at load factors up to 60%. The FERC opinion said that the 50% difference in load factors between zones 2 and 3 was not "extreme" enough to warrant a departure from the Mcf-mile method. *Id.* at 14.

A final consideration offered by zone 3 parties was the use of storage facilities in zone 3 to benefit zones 1 and 2. To meet peak demands for gas, Transco pipes gas sold to zones 1 and 2 in summer into storage in zone 3. In the winter, this gas is used in zone 3, and gas sold to zone 3 is delivered to customers in zone 1 and 2. The storage facilities in zone 3 provide system-wide savings because they obviate the need for increased capacity to meet peak winter demand. The Commission chose not to give this factor any weight because it found that this displacement procedure involved no physical transport of gas and therefore no material cost. Opinion No. 59 at 16.

Both zone 2 and zone 3 parties question the Commission's determination of which costs will be included in the Mcf-mile method and thus vary with distance. The Commission included in its Mcf-mile calculations Transco's costs of gathering and transmitting its gas before it reaches the first customer in zone 1, although it did not

---

[11] This definition in found in P. GARFIELD & W. LOVEJOY, PUBLIC UTILITY ECONOMICS 175 (1964).

[12] *Id.*

provide any reasons for that allocation in its opinion. At stake is the proper allocation of $30.5 million in gathering costs. Record at 292. Both Transco and the zone 3 petitioners assert that the cost of these gathering facilities upstream of Transco's closest customer cannot possibly vary with distance.

II

Judicial review of orders such as these is a delicate task. In the *Permian Basin Area Rate Cases*, 390 U.S. 747 (1968), Justice Harlan said that reviewing courts must carefully scrutinize the Commission's decisionmaking process, but defer to its expert judgment:

> The Court's responsibility is not to supplant the Commission's balance of these interests with one more nearly to its liking, but instead to assure itself that the Commission has given reasoned consideration to each of the pertinent factors. Judicial review of the Commission's orders will therefore function accurately and efficaciously only if the Commission indicates fully and carefully the methods by which, the and the purposes for which, it has chosen to act. . . .

390 U.S. at 792. However, Justice Harlan also cautioned courts to remember that

> . . . Congress has entrusted the regulation of the natural gas industry to the informed judgment of the Commission, and not to the preferences of reviewing courts. . . .
>
> . . . [C]ourts are without authority to set aside any rate selected by the Commission which is within a "zone of reasonableness." *FPC v. Natural Gas Pipeline Co.*, 315 U.S. 575, 585. No other rule would be consonant with the broad responsibilities given to the Commission by Congress; . . .

Id. at 767 (1968).

We think the same balance should be struck in this case. While we must pay proper deference to the expertise of the agency entrusted with administering the Natural Gas Act, and while we cannot substitute our judgment for the Commission's in weighing the relevant factors and the proffered evidence, we cannot, as some of the parties have suggested, limit ourselves to looking at the result. Our responsibility under the Natural Gas Act, § 19(b), 15 U.S.C. § 717r(b) (1976), is to determine whether the Commission, in either of these orders, exceeded or misinterpreted its authority under the Act, and to ensure that "each of the order[s'] essential elements is supported by substantial evidence." 390 U.S. at 791-92.

III

In 1976, when Transco filed for rate increases, it did not propose any change in the allocation of costs according to distance. It was willing to continue using the 1962 differentials that had been included in many prior rate settlements approved by the FPC. The Commission's decision, because it did not determine that the old zone rates were unjust or unreasonable and because it did not provide a reasoned explanation for the departure from settled practice, cannot withstand our scrutiny.

A. *The Commission's Authority Under Section 5(a) of the Natural Gas Act*

Section 5(a) of the Natural Gas Act, 5 U.S.C. § 717d (a) (1976), provides in pertinent part:

> Whenever the Commission, after a hearing had upon its own motion or upon complaint . . . shall find that any rate, charge, or classification . . . collected by any natural-gas company . . . or that any . . . practice . . . affecting such rate . . . is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just

> and reasonable rate, . . . classification, [or] practice, . . . and shall fix the same by order. . . .

The Commission, then, has the power under the Natural Gas Act to impose its own rates or methods for their calculation upon regulated companies only after finding an existing or proposed rate unjust or unreasonable. The Commission argues that it need not make a section 5(a) determination because Transco itself has filed for new rates under section 4 of the Act.[13] The zone 3 petitioners

---

[13] The relevant portions of section 4 of the Natural Gas Act, 15 U.S.C. § 717c (1976), provide:

> (a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is declared to be unlawful.
>
> (b) No natural-gas company shall, with respect to any transportation or sale of natural gas subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.
>
> . . . .
>
> (d) Unless the Commission otherwise orders, no change shall be made by any natural-gas company in such rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto, except after thirty days' notice to the Commission and to the public. Such notice shall be given by filing with the Commission . . . .
>
> (e) Whenever any such new schedule is filed the Commission shall have authority, either upon complaint of any State, municipality, State commission or gas distributing company, or upon its own initiative without complaint, at once, and if it so orders, without answer or

argue that the Commission must comply with section 5(a) and that its failure to do so denies "Transco's existing zone differentials the substantive consideration they deserved." Zone 3 Customers' Br. at 12. We agree.

---

formal pleading by the natural-gas company, but upon reasonable notice, to enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service; and, pending such hearing and the decision thereon, the Commission, upon filing with such schedules and delivering to the natural-gas company affected thereby a statement in writing of its reasons for such suspension, may suspend the operation of such schedule and defer the use of such rate, charge, classification, or service, but not for a longer period than five months beyond the time when it would otherwise go into effect; and after full hearings, either completed before or after the rate, charge, classification, or service goes into effect, the Commission may make such orders with reference thereto as would be proper in a proceeding initiated after it had become effective. If the proceeding has not been concluded and an order made at the expiration of the suspension period, on motion the natural-gas company making the filing, the proposed change or rate, charge, classification, or service shall go into effect. Where increased rates or charges are thus made effective, the Commission may, by order, require the natural-gas company to furnish a bond, to be approved by the Commission to refund any amounts ordered by the Commission, to keep accurate accounts in detail of all amounts received by reason of such increase, specifying by whom and in whose behalf such amounts were paid, and, upon completion of the hearing and decision, to order such natural-gas company to refund, with interest, the portion of such increased rates or charges by its decision found not justified. At any hearing involving a rate or charge sought to be increased, the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the natural-gas company, and the Commission shall give to the hearing and decision of such questions preference over other questions pending before it and decide the same as speedily as possible.

The Commission seems to be operating under the notion that it has the choice of proceeding under section 4 or section 5 of the Act. But this court and others have consistently interpreted the Natural Gas Act as offering no such choice. Justice Harlan said, almost a quarter of a century ago, that

> . . . the very premise that §§ 4(d) and (e) and 5(a) are alternative rate-changing "procedures" is itself based on a misconception of the structure of the Act. These sections are simply parts of a single statutory scheme under which all rates are established initially by the natural gas companies, . . . and all rates are subject to being modified by the Commission upon a finding that they are unlawful. . . .
>
> The powers of the Commission are defined by §§ 4(e) and 5(a). The basic power of the Commission is that given it by § 5(a) to set aside and modify any rate or contract which it determines, . . . to be "unjust . . .". This is neither a "ratemaking" nor a "rate-changing" procedure. It is simply the power to review rates and contracts made in the first instance by natural gas companies, and if they are determined to be unlawful, to remedy them.

United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332, 340-41 (1956). This interpretation is in accord with the legislative history of the Natural Gas Act, which states that it is section 5(a) that "authorizes the Commission . . . to fix charges and reasonable rates. . . ." H.R. Rep. No. 709, 75th Cong., 1st Sess. at 5 (1937).

The decisions of this and other courts and of the Federal Power Commission itself have recognized that the Commission's power to set rates or their method of calculation is derived from section 5(a). This court has said, in the context of gas supply curtailment, that "[f]or the purpose of imposing an alternate plan, section 5 is

necessary . . . . [N]owhere in section 4 is there granted the power to impose alternate rates." *City of Willcox v. FPC*, 567 F.2d 394, 402 (D.C. Cir. 1977), *cert. denied*, 434 U.S. 1012 (1978).[14] The Fifth Circuit, in *Southern Natural Gas Co. v. FPC*, 547 F.2d 826, 832 (5th Cir. 1977), declared that the FPC "had no statutory authority to impose its own curtailment plan . . . absent its compliance with the procedural and substantive standards of section 5." The Commission itself, in its landmark case establishing zoned cost allocations, *Northern Natural Gas Co.*, 14 FPC 11 (1955), recognized that its power to reject NNG's existing uniform rates and substitute its own zone rates was based upon section 5(a). 14 FPC at 19. The FPC also said that "[t]he fact that this proceeding was initiated under the primary authority of section 4(e) of the Act is immaterial." *Id.* at 19 n.8.

The confusion over the statutory powers of the FPC and its successor, FERC, is perhaps based upon the curtailment cases and the context in which they arose. The FPC, to avoid the delays in processing curtailment plans that would be engendered under section 5, had ordered natural gas companies to file their own curtailment plans under section 4, giving itself the option of converting the section 4 filing to a section 5(a) proceeding if it found the proposed plans unfair or discriminatory. *FPC v. Louisiana Power & Light Co.*, 406 U.S. 621, 643-45 (1972). In later years, the FPC continued this practice, but reviewing courts closely monitored the Commission's orders to file plans to ensure that

---

[14] For other cases following this interpretation of section 5(a), see, *e.g.*, FPC v. Louisiana Power & Light, 406 U.S. 621 (1972); Sebring Utilities Comm'n v. FERC, 591 F.2d 1003 (5th Cir.), *cert. denied*, 100 S.Ct. 167 (1979); State of Louisiana v. FPC, 503 F.2d 844, 861 (5th Cir. 1974); American Smelting and Refining Co. v. FPC, 494 F.2d 925, 933 (D.C. Cir.), *cert. denied*, 419 U.S. 882 (1974).

they were not so "coercive" as to dictate a particular plan to a natural gas company. *See, e.g., Sebring Utilities Comm'n v. FERC*, 591 F.2d 1003, 1015-16 (5th Cir.), *cert. denied*, 100 S.Ct. 167 (1979). The courts were concerned lest the Commission impose its own curtailment plans without following the formalities prescribed by section 5(a). To prevent section 5(a) from being undermined, reviewing courts approved curtailment plans filed under section 4 only if they were the product of the company's own decision. When reviewing courts found that the plans had in fact been dictated by the Commission and that section 5(a) procedures had not been followed, they did not hesitate to vacate those plans. *See, e.g., State of Louisiana v. FPC*, 503 F.2d 844, 861 (5th Cir. 1974). The Commission, therefore, never had the choice of imposing its own curtailment plans under section 4 or section 5(a). The curtailment cases approved only the Commission's authority to order regulated companies to file *their own*, not the Commission's, plans under section 4.

The Commission contends that it need not observe section 5(a) procedures because this case was commenced by Transco's filing for higher rates under section 4(e), which places the burden of proof upon the petitioner. But section 4(e) places upon the petitioner the burden of justifying its higher rates only when the petitioner has proposed an increase in rates.[15] Therefore, we agree that Transco had the burden of proof on the rate of return question,[16] but we cannot accept the proposition that because a company files for higher rates, it bears the burden of proof on those portions of its filing that represent no departure from the status quo.

---

[15] *See* FPC v. Louisiana Power & Light Co., 406 U.S. 621, 645 (1972); FPC v. Tennessee Gas Co., 371 U.S. 145, 152 (1962); American Louisiana Pipe Line Co. v. FPC, 344 F.2d 525, 529-30 (D.C. Cir. 1965).

[16] *See* note 27 *infra*.

The Commission's reading of section 4(e) is inconsistent with the text of the statute, the legislative history, and sound regulatory policy. Section 4(e) states that "the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the natural-gas company, . .". The emphasis is on making the petitioner justify the changes in rates, not the constant elements. With like import, the legislative history states that the "burden of proof is placed upon the natural-gas company to justify increase in rates." H.R. No. 709, 75th Cong., 1st Sess. at 5 (1937). The zone allocations in dispute here were no part of Transco's argument for higher rates. Forcing the petitioning company to justify not only the novel portions of its petitions but the unchanged parts as well would seriously increase the burden upon these regulated companies without any corresponding improvement in reasoned decisionmaking.

Even if we assume that Transco bore the burden of proof in justifying its existing zone allocations, we would be unable to find the Commission's action outside the ambit of section 5(a). At most, section 4(e) would give the Commission authority to vacate a submission in favor of the prior rate schedule. It can never be used by FERC as authority to impose any new rate for which a regulated company did not petition. If the Commission seeks to institute its own rates, it has no alternative save compliance with section 5(a).

We must now decide whether the Commission followed the procedures of section 5 in replacing zoned cost allocations with the Mcf-mile method. Before the Commission, consistent with section 5(a), could move to the Mcf-mile method, it had to determine that the previous zone differentials were "unjust, unreasonable, unduly discriminatory, or preferential," a determination that must be supported by substantial evidence and in respect of which the Commission bears the burden of proof.

At the outset we are confronted by the Commission's failure in Opinion No. 59 to conclude explicitly that the old zone differentials are unjust or unreasonable. The opinion did state that "[t]he Commission . . . finds that no adequate or proper basis has been shown to justify the continued application of previously negotiated settlement rate differentials. . ." Opinion No. 59 at 5. We think that this statement does not qualify as a finding that the zone differentials can be voided under section 5(a), because section 5(a) places the onus of invalidating the existing method on the Commission. It is not enough that the petitioners failed to prove that the zone differentials are just and reasonable. It is the Commission which must adduce substantial evidence tending to show that the existing zone rates are unjust and unreasonable. Its failure to do so is fatal,[17] because it lacks the authority to substitute one rate for another without adhering to the requirements of section 5(a).

B. *The Commission's Burden Under the* Columbia Gas *Rule*

Last year this court held that the Federal Energy Regulatory Commission "bears the burden of explaining the reasonableness of any departure from a long stand-

---

[17] The Commission argues on appeal that the zoned rates are facially unfair and unjust because they are nothing more than agreed-upon numbers without any basis in cost allocation methodology. The mere fact that these numbers resulted from settlement is not enough to prove that they are unjust or unreasonable when evidence has been introduced tending to show that they more accurately reflect cost incurrence on the Transco system than the Mcf-mile method. *See* section III, B *infra*.

In addition, we would have serious difficulty upholding the Commission on the basis of this argument, because it was first explicitly made by the Commission's lawyers on appeal. SEC v. Chenery Corp., 318 U.S. 80, 87 (1943).

ing practice, and any facts underlying its explanation must be supported by substantial evidence." *Columbia Gas Transmission Corp. v. FERC*, No. 77-1627, at 14 n.31 (D.C. Cir. May 17, 1979).

We are faced with the threshold issue of the relevance of the *Columbia Gas* rule to this proceeding. The Commission urges that *Columbia Gas* is inapplicable here because the 1962 differentials were merely numbers that did not reflect a recognized methodology and because Commission approval of settlements incorporating the zone allocations does not constitute a settled practice.

The purported distinction between a recognized method and an agreed-upon set of numbers cannot suffice to remove this case from the ambit of *Columbia Gas*, because the same type of agreed-upon numbers were at issue there. In *Columbia Gas*, the Commission had departed from use of the *Seaboard* method, which allocated costs equally between the demand charge, which is a fixed charge, and the commodity charge, which varies with the volume of gas consumed, and had instead adopted the *United* method, which changed the split to 25% - 75%. *Columbia Gas* at 7 n.12, 9-13. The FERC decision was remanded because this court found that the Commission had not provided a "reasoned explanation" for the switch. *Id.* at 14. But the *Seaboard* cost-allocation method is nothing more than the 50-50 split: an arbitrary number which has been criticized as having little relation to actual cost incurrence.[18]

Nor is it of any significance that the zone differentials in the instant case are the result of a settlement. The application of the *Seaboard* numbers to the Texas Gas Transmission Corp., the petitioner in the *Columbia Gas*

---

[18] *See* Lorne, *Natural Gas Pipeline, Peak Load Pricing, and the Federal Power Commission*, 1972 Duke L. J. 85, 99.

case, was also a result of a settlement. *See Texas Gas Transmission Corp.*, 52 FPC 1930 (1974).

We can now turn to the Commission's Opinion No. 59 to search for the reasoned decisionmaking that justifies the deviation from zone allocations to the Mcf-mile method. Again, it is not sufficient that the petitioners have not justified the existing zone differentials. It is the Commission that must provide the substantial evidence to support its departure from long-standing practice.

The Commission tried to justify the switch to Mcf-mile by stating, as general principles, that "distance of transmission has long been regarded as having the most constant and predictable relation to cost," and that "distance is the prime determinant of . . . cost." Opinion No. 59 at 5-6. While this may well be true, it is simply not relevant to any discussion of the comparative merits of zone and Mcf-mile cost allocation on the Transco system. The question that the Commission faced was not whether it should allocate costs according to distance, but whether, given the particular circumstances of the Transco system, the Mcf-mile method did a better job of accurately reflecting those distance-related costs than did the existing zone differentials.[19]

The proper place for considering the cost-based issues raised by zone 3 parties, such as load factor, load concentration, and zone 3 storage, is in choosing between zone allocations and some other method. In this case, however, the Commission decided first that the Mcf-mile method was superior and then rejected challenges

[19] We do not wish to suggest that the Commission may only consider accurate reflection of costs in making these decisions. But if it wishes its order to reflect other ends it must so state. Opinion No. 59 suggests that the Commission was only interested in accurate cost allocation.

to that.[20] That technique begs the question to which all parties have a right to an answer: on the Transco system, were the zone allocations more accurate than the alternatives?

We do not concur in the Commission's argument on appeal that the zone allocations were obviously inaccurate because they were the result of a 1962 compromise, rather than of methodical calculation. The fact that parties with adverse interests agreed to those numbers, and continued to do so in later years gives rise to the

---

[20] We can pretermit any extended discussion of the Commission's treatment of these mitigating factors because we cannot agree with its initial conclusion to move to Mcf-mile cost allocation. But we have reservations about the Commission's handling of some of these matters. While their conclusion that variations in load factor were not "extreme" enough to warrant a departure from Mcf-mile is an exercise of their expert judgment and thus difficult for us to disturb, their discussion of load concentration and zone 3 storage suggests flaws in the Commission's decisionmaking.

The Commission refused to attach weight to the 75% load concentration in zone 3 because it said that all zones contribute substantially to economies of scale on the Transco system. But this is not altogether responsive to the arguments of zone 3 customers, because the issue is not whether all zones contribute, but the relative contributions of the three zones. The inference that the economies of scale are mostly attributable to zone 3 remains unrebutted by the Commission's reasoning.

The Commission also refused to take the zone 3 storage facilities into account, stating that the displacement procedure involved no material cost. But the importance of the zone 3 storage lies not in costs *incurred*, but in costs *avoided*. The FPC has in the past, with the approval of this court, allocated terminal zone storage costs to all zones because the use of the facilities for displacement saved all customers money. Consolidated Gas Supply Corp. v. FPC, 520 F.2d 1176 (D.C. Cir. 1975). If these facilities save Transco and its customers money, it would seem proper that zone 3 customers get some of the benefits.

not unreasonable inference that many parties thought them fair at one time, although, of course, the inability of those numbers to win assent in this proceeding suggests that some of the parties now think otherwise. Further, we do not understand why the Mcf-mile method is obviously superior to the zone method when applied to Transco. While it may be true that cost increases with distance, the Mcf-mile method assigns cost by distance and volume. If there are any economies of scale on the Transco system, then the relationship between cost and distance will be far more direct than between cost and volume.[21]

In addition, the inclusion of upstream gathering facilities in the mileaging calculation appears to distort significantly the cost allocation imposed on the Transco system by Mcf-mile. The Commission, in its Opinion No. 59, does not provide any basis for concluding that Transco incurs more upstream costs in serving zone 3 than zone 2 customers. Although we remain deferential to reasoned decisionmaking by an expert agency, it would appear that costs incurred upstream of Transco's first customer vary little, if at all, with the comparative distances of Transco customers.[22]

---

[21] We recognize that the zone system also allocates costs by distance and volume. But the existence of economies of scale on the Transco system suggests that costs should not rise quite as rapidly for increases in volume as for distance. Thus, the lesser differentials of the zone system may reflect more closely, although still inaccurately, the ameliorative effect of economies of scale than would the Mcf-mile method.

[22] We need not decide the question of the allocation of administrative and general transmission costs by volumetric, rather than Mcf-mile, calculation, because we have not been able to uphold the Commission's determination that any form of Mcf-mile cost allocation is appropriate on the Transco system.

Finally, the record contains evidence that tends to prove the relative superiority of the zone allocation system as a more accurate reflection of cost incurrence. *See* Record at 1026-30, 2497. While this evidence is certainly open to dispute, it does suggest that the zone allocation figures are not facially absurd and that they deserve the reasoned consideration that the *Columbia Gas* rule seeks to provide.

We conclude, therefore, that the Commission's order directing the change to a mileage-McF allocation of costs is invalid. That is so in the first instance because of the Commission's disregard of the procedural requirements of section 5(a). The Commission erred in (1) placing the burden of proof on the opponents of the change in cost allocation rather than upon itself and (2) failing to make the findings that the existing zone rates legally in effect were unlawful. Without such findings, section 5(a) does not empower the Commission to prescribe a different method of cost allocation affecting differential rates. In any event, the evidence of record supporting that prescription falls short of substantiality.

IV

The Commission determination of 14% as a reasonable return on Transco equity for the eleven-month "locked-in" period faces attack from two sides. On one flank, NCUC argues that the rate of return is too generous because the decision did not take into account Transco's allegedly inept management and unused facilities. On the other, Transco contends that the Commission's determination is neither supported by substantial evidence nor consonant with *Columbia Gas.*

The Commission dismissed NCUC's contentions of inept management and unused facilities on the grounds that the petitioner had not introduced any evidence to support these claims. Initial Decision at 7 n.5. NCUC

had argued that the depth of curtailment of service on the Transco system suggested both conclusions, but the Commission concluded that mere curtailment, even to 50% capacity, did not of itself establish bad management or idle facilities. We find nothing in the record to warrant our disturbance of the Commission's judgment.

In support of its claim that the 14% is too low, Transco first argues that it is not possible to trace the path by which the ALJ, and thus the Commission by adoption of the ALJ initial decision, arrived at the 14% figure. We think it is. We begin with the testimony, on which the ALJ primarily relied, of the staff's expert witness, who had himself concluded that 14% was a reasonable figure.

The staff expert compared the risks facing Transco with those facing other regulated companies. He divided risks between the possibility of business reverses, which is called business risk, and financial risk, which varies with the amount of debt and preferred stock and thus with the size of the firm's interest and dividend obligations. Record at 163-64. While it is not in dispute that Transco's relatively thin equity ratio[23] of 24.1% indicates a higher level of financial risk and thus justifies a higher level of return on equity than other pipelines, there is considerable disagreement concerning the degree of business risk that Transco faces.

The staff witness suggested that the two types of risk are related: a regulated utility such as a pipeline company with a relatively low business risk but a relatively higher financial risk may still attract investors. Record at 164. This appears sensible, since a company

---

[23] Equity ratio is the percentage of common equity to total capital. Transco's capital structure in 1977 was 63% long-term debt, 13% preferred stock, and 24% common stock. Initial Opinion at 6 n.4.

looking forward to consistent profitability can worry less about high fixed interest charges or dividends that would constitute a threat to the solvency of the firm should profits evaporate. Thus, a high level of financal risk is relatively less important to a firm, such as a regulated pipeline, with a relatively low business risk.

The staff witness found that Transco's business risks, chiefly related to the possibility of gas supply shortages, were lessening because the company's exploration program was expected to produce improved supplies. Record at 167-68. However, the staff witness found Transco's business risks to be slightly above average. Having found Transco's business and financial risks to be somewhat higher, although not remarkably so, than other pipelines whose allowed rates of return fell between 13.5% and 13.75%, the staff witness recommended a rate of return of 14%.[24] Record at 168; Initial Opinion at 9-10.

---

[24] Transco assigns as error the ALJ's dismissal of Transco's evidence. The ALJ had refused to credit the Transco witness's comparison of Transco with electric utilities because, according to the ALJ, electric utilities are entitled to a higher rate of return because of their greater capital requirements. Transco on appeal claims that the Commission had traditionally thought of gas pipelines as riskier than electric utilities and thus the ALJ's reasoning is unsupportable.

We do not think that the ALJ's assertion, if it is in fact flawed, would be fatal to the Commission, because substantial evidence supports the portions of the ALJ's decision that justify a 14% return. The staff witness's estimate was adopted, and the Transco witness's estimate was not, because the ALJ and the Commission concluded in an exercise of their expert judgment that the staff witness's estimate of the risks facing Transco compared to those facing other gas pipelines was superior to the estimate made by Transco's witness. The dispute facing the ALJ turned on Transco's risk to investors, not whether this risk was more or less than that of electric utilities.

The Initial Opinion also takes note of Transco's "modest prosperity" despit chronic natural gas shortages as justifying a rate of return no higher than 14%. *Id.* at 9. By this the ALJ is apparently referring to Transco's earnings compared to those of other major pipeline companies. Except for 1974, an aberrationally bad year, Transco consistently earned more on its equity than the pipeline average, Exhibit No. 17 at 2.[25] Its earnings per share also increased from 1974 to 1976. Record at 482.

Transco presented its own witness who came to rather different conclusions. The Transco witness found the company's business risks related to gas supplies "five [or] ten—fifteen years down the road" more significant than had the staff witness. Record at 464. The ALJ, noting that the rates in question were locked in for only an eleven-month period, refused to attach weight to the possibilities of natural gas shortages five to fifteen years from the time when the rates in this docket were applicable.

Transco objects that the Commission is departing from past practices in refusing to consider long-term risks in a locked-in rate proceeding. We think that Transco misperceives the thrust of the relevant cases it cites.[26] Those cases held that the Commission should look to the long-term cost of raising capital and other pertinent risks

---

[25] There were two minor errors in the first version of this exhibit which, when corrected, indicated that comparable pipelines actually earned less on their equity than had been first stated. Thus, the corrected version makes Transco's performance relative to comparable pipelines look even better.

[26] See Municipal Light Boards v. Boston Edison Co., 53 FPC 1543, 1556 (1975); American Louisiana Pipe Line Co., 28 FPC 482, 486 (1962). It is also possible that the practice is not quite as settled as Transco contends, given the number of relevant cases to which it could point.

even when it is considering locked-in rates. The rationale of these cases is unexceptionable: a regulated company faces the same long-term problems regardless of the frequency of its rate filings. To look only at short-term risks and costs in considering a locked-in rate raises the possibility that the company will never be adequately compensated for long-term risks and costs present during the locked-in period.

But the administrative law judge did not dismiss the risk of gas supply shortages solely because he was deciding a locked-in rate. He concluded that the risk was not likely to arise at all during the locked-in period. The long-term costs of raising capital and the pertinent risks of confronting the company when it makes its request are ongoing factors present during the locked-in period. The risk of gas supply shortages ten or fifteen years from the locked-in period may well not concern investors at all during the locked-in period. The ALJ's opinion also suggests that he found the risk too speculative and thus not pertinent to Transco's petition. Given the testimony of the staff's witness that Transco's supply situation should improve, the ALJ was acting well within his expert judgment in disregarding the conjectures of Transco's witness.

Transco also attempts to persuade us that the Commission's 14% determination is deficient under the *Columbia Gas* rule,[27] because the Commission had thrice

---

[27] We think that the Commission complied with the requirements of sections 4(e) and 5(a) of the Natural Gas Act in making its rate-of-return determination. Reading sections 4(e) and 5(a) together, we conclude that the Commission is not obliged to bear the burden of proving a change resulting from higher rates unjust. It need only conclude that the petitioner has failed to carry its burden of proof. Against a background of obvious conflict in credible testimony, the conclusion that Transco failed to carry its burden is inherent in

before approved Transco settlements that included a 14.75% rate of return and had allowed pipelines with thicker equity ratios returns between 13.5% and 13.75%. We do not think that *Columbia Gas* can be applied as Transco has suggested.

The contract between the situation facing the decision-maker in *Columbia Gas* and in this case is illuminating. In *Columbia Gas*, the Commission was choosing between present practice and a discrete alternative. Here the ALJ faced an infinitude of choices from a low of 13.5% to a high of 17% without any distinct point of departure. He was confronted with evidence and precedent suggesting that almost any figure he chose in that range would find some support. Based on expert testimony, he picked 14% as the most reasonable rate within a zone of reasonableness extending from 13.5% to 14.3%.

It could not be said that earlier practice had been opposed to his judgment. The Commission approved settlements of 14.75% rate as just and reasonable, but did not indicate that neighboring figures might not also be just and reasonable, or even more just and reasonable. The other cases all involved facts to some extent different from those at issue here; the weight to give those differences was ultimately unquantifiable and reserved for expert judgment.[28]

---

the Commission's determination that any rate higher than 14.3% falls outside the zone of reasonableness.

However, when the Commission not only voids a proposed rate increase, but institutes a rate of its own under section 5(a) rather than continuing the old rate in effect, it must adduce substantial evidence to prove (1) that the old rate is unjust and unreasonable and (2) the Commission's proposed rate is just and reasonable. The Commission's conclusion that only rates between 13.5% and 14.3% are just and reasonable and the substantial evidence that supports it fulfill the requirements of section 5(a) on both necessary findings.

[28] The relevance of FERC approval of rates of return of between 13.5% and 13.75% on equity ratios of 36% to 37%

Extension of *Columbia Gas* in the manner suggested by Transco would lead the Commission into a swamp of past decisions of varying degrees of relevance with widely scattered outcomes. The Commission could be caught in a withering cross-fire, with some litigants demanding adherence to past settlements involving *this* company, and others demanding adherence to rates involving similar firms, or even, as Transco asks here, substantial departure from rates granted to dissimilar firms on the grounds that failure to pay adequate heed to the differences constitutes departure from settled practices.

We think that the burden this court placed upon the Commission in *Columbia Gas* to explain its switch from one method to a discrete alternative was reasonable. We think that making the Commission explain why it did not choose every other plausible result when it is faced with a multitude of possible outcomes and with precedents whose relevance is a matter of judgment and which do not suggest any one settled practice is both unreasonable and unlikely to advance the cause of reasoned decisionmaking.

Our task in reviewing the reasonableness of a particular rate of return, therefore, is not to see whether it nestles closely to past decisions on a plot of rates of return against equity ratios, but to ensure that the Commission's judgment is supported by substantial evidence and that the methodology used in arriving at that judgment is either consistent with past practice or adequately justified under the *Columbia Gas* decision. Hav-

---

in other cases is especially suspect. The staff's expert had said that variations in financial risk vary in importance with the degree of business risk. Having found Transco's business risk just slightly above average for pipelines, and thus far safer than unregulated enterprises, the ALJ acted reasonably in granting only a slightly higher rate of return for Transco's markedly thinner equity ratio.

ing concluded that the Commission decision was supported by substantial evidence, we need only examine whether the methodology used by the Commission was in keeping with past practice. In this case, there is no dispute that the Commission's expert witness used the traditional comparable earnings and risk tests. Indeed, Transco's witness used the same methodology, Transco Br. at 15-17, but arrived at different conclusions because he judged the risks rather differently. The Commission's reliance upon settled methodology is all that is required to fulfill the standards of *Columbia Gas.*

V.

The partial stay of December 11, 1979 provided that the higher rates collected from zone 3 customers would be held by Transco in an escrow fund, to be distributed to customers in zones 1 and 2 if Opinion No. 59 were to be upheld and to zone 3 customers if Opinion No. 59 were to be reversed. Since we have reached the conclusion that FERC's rate of return order may stand, while its cost allocation order and opinion must be reversed,[29] the December 11 order requires those monies, plus earnings, held in escrow by Transco be distributed, as contemplated by the court, to the customers in sales zone 3.

It is so ordered.

---

[29] Our reversal on the cost allocation issue allows us to pretermit resolution of the propriety of the exclusion of LILCO's marginal cost evidence from the proceedings leading up to the adoption of the Mcf-mile method. *See* Record at 745-46, 760-83. Similarly, we are not confronted with the Commission's refusal to apply the lower Mcf-mile rates retrospectively in zones 1 and 2.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

OPINION NO. 59

Transcontinental Gas Pipe Line Corporation	))	Docket Nos. RP76-136 and RP77-26

OPINION AND ORDER REVERSING INITIAL DECISION AND ESTABLISHING ZONE RATES BASED UPON FULLY ALLOCATED COSTS

Issued: August 6, 1979

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Transcontinental Gas Pipe Line Corporation	))	Docket Nos. RP76-136 and RP77-26

OPINION NO. 59

APPEARANCES

Thomas F. Ryan, Jr., Robert G. Hardy and *Brian E. O'Niell* for Transcontinental Gas Pipe Line Corporation

John D. Daly, Jr., and *Giles D. H. Snyder* for Columbia Gas Transmission Corporation

Paul W. Fox and *John S. Schmid* for Delmarva Power & Light Company

Norman A. Flanigan, Charles R. Brown and *George L. Weber* for Consolidated Natural Gas Service Company, Inc.

Henry P. Sullivan for Consolidated Gas Supply Corporation

Edward S. Kirby, James R. Lacey, William R. Duff and *Carl W. Ulrich* for the Public Service Electric & Gas Company

Joseph P. Stevens, Barbara M. Gunther and *Michael W. Hall* for The Brooklyn Union Gas Company

John T. Miller, Jr., for Elizabethtown Gas Company

Stephen H. Watts II for Commonwealth Natural Gas Corporation

William I. Harkaway, Garrett Austin, G. Douglas Essy and *John M. Cutler, Jr.*, for Consolidated Edison Company of New York, Inc.

Richard A. Solomon, Sheila S. Hollis, Peter H. Schiff and *Dennis Lane* for the Public Service Commission of the State of New York

Dale A. Wright and *Gregory Grady* for Public Service Company of North Carolina, North Carolina Natural Gas Corporation, and Piedmont Natural Gas Company, Inc.

Susan A. Low for Washington Gas Light Company

James S. D. Eisenhower III for National Fuel Gas Supply Corporation

John B. Gontrum and *James A. Pine* for the Maryland Public Service Commission

John T. Stough, Jr., for Atlanta Gas Light Company

Ira G. Megdal for South Jersey Gas Company

Jack M. Irion for United Cities Gas Company

Linda S. Mounts and *Ronald D. Eastman* for Burlington Industries, Inc.

Richard A. Oliver, Richard P. Noland and *Edward J. Grenier, Jr.,* Cannon Mills Company, Cone Mills Corporation, Nabisco, Inc., Pine Hall Brick & Pipe Corporation

Edward G. Bauer, Jr., Eugene J. Bradley and *Donald Blanken* for Philadelphia Electric Company

William J. Benham for Texaco, Inc.

Barry J. Hart and *Stephen Schachman* for Philadelphia Gas Works

Stephen Watts for CNG Transmission Company

Morton L. Simons for North Carolina Utilities Commission

Keith R. McCrea and *Wayne W. Whitney* for Corning Glass Works, Lithium Corporation of America, Sayles Biltmore Bleacheries, Inc., and The Torrington Company

Frederick H. Ritts for the City of Danville, Dan River, Inc., and Philip Morris, Inc.

John J. Lahey, Norman A. Pedersen and *Michael A. Kelley* for the Staff of the Federal Energy Regulatory Commission

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Charles B. Curtis, Chairman; Georgiana Sheldon, and Matthew Holden, Jr.

Transcontinental Gas Pipe Line Corporation	))	Docket Nos. RP76-136 and RP77-26

OPINION NO. 59

OPINION AND ORDER REVERSING INITIAL DECISION AND ESTABLISHING ZONE RATES BASED UPON FULLY ALLOCATED COSTS

(Issued August 6, 1979)

This proceeding was initiated on July 30, 1976, when Transcontinental Gas Pipe Line Corporation (Transco) tendered for filing in Docket No. RP76-136 a general rate application requesting an increase of $81.3 million annually for jurisdictional natural gas sales and services.[1] On August 30, 1976, the FPC accepted the proposed increase for filing, suspended its use for five months until February 1, 1977, and set the matter for hearing. Transco's filing in Docket No. RP77-26, proposing an increase in interruptible transportation rates, was submitted on December 30, 1976, and was suspended and set for hearing by the FPC on January 31, 1977. The FPC consolidated the two proceedings for purposes of hearing and decision.

By order of June 27, 1978, the Commission approved a settlement agreement in these proceedings, but set the zone

---

[1]This proceeding was commenced before the Federal Power Commission (FPC). By the joint regulation of October 1, 1977 (10 CFR § 1000.1), it was transferred to the FERC. The term "Commission" when used in the context of action taken prior to October 1, 1977, refers to the FPC; when used otherwise, the reference is to the FERC.

rate differential issue for hearing.[2] Following the hearing and submission of briefs, the judge issued his initial decision on the zone rate differential issue on December 19, 1978. The judge approved the historical zone rate differentials which have been in effect on Transco's system since 1962. These differentials amounting to 2.8 cents per Mcf between zones 1 and 2 and 3.6 cents per Mcf between zones 2 and 3, were approved by the FPC as part of a settlement of Transco's rate proceedings in Docket No. RP61-13, 27 FPC 187 (1962), and have remained in effect since that time.[3] Zone 3 interests[4]

---

[2]The settlement resolved all issues in these proceedings except four: (1) rate base treatment of certain advance payments, (2) rate base treatment for unsuccessful alternate gas supply costs, (3) rate of return on equity and (4) carrying charges on unrecover demand charge credits. The issue of rate base treatment for certain advance payments was severed from this proceeding by order issued October 21, 1977, and is to be resolved in the consolidated proceeding in *Transcontinental Gas Pipe Line Corporation*, Docket Nos. RP74-48 and RP75-3 (AP76-1) *et al.* The unsuccessful alternate gas supply costs issue was decided on June 20, 1979, when the United States Court of Appeals for the District of Columbia Circuit, in *Transcontinental Gas Pipe Line Corporation* v. *Federal Energy Regulatory Commission*, No. 77-1712, affirmed the Commission in excluding from Transco's rate base expenditures for unsuccessful alternative gas supply projects. The remaining two issues of rate of return and carrying charges on unrecovered curtailment credits are the subjects of an initial decision issued February 13, 1978. These two issues will be considered in a separate order.

[3]Transco's system is a major long-line natural gas transmission system originating in the Texas and Louisiana gas supply areas and extending, through three sales rate zones, to its terminus in the New York City metropolitan area. Zone 1 extends from approximately the Mississippi-Louisiana border through Alabama to the Georgia-South Carolina border. Zone 2 includes South Carolina, North Carolina, Virginia, and Washington, D.C. Zone 3 includes Maryland, Delaware, Pennsylvania, New Jersey and New York.

[4]New York Public Service Commission, Delmarva Power and Light Company, Philadelphia Gas and Water Company, Philadelphia Gas Works, and the Zone 3 Customer Group (The Brooklyn Union Gas Company, Consolidated Edison Company of New York, Inc., Elizabethtown Gas Company, Long Island Lighting Company, Philadelphia Electric Company, Public Service Electric and Gas Company, and South Jersey Gas Company, all distributor customers of Transco, and National Fuel Gas Supply Corporation, a pipeline customer of Transco).

support the judge's decision. Zone 1 and zone 2 interests[5] oppose the continued use of the historical differentials and advocate instead unadjusted zone rates resulting from an Mcf-mile[6] (or dekatherm-mile)[7] allocation of transmission costs to zones. The staff, in its brief on exceptions, continues to favor a compromise approach which would give 50 percent weight to mileage and 50 percent weight to the historical rate differentials. Transco strikes a neutral posture, with its primary concern being that any change in the historical differentials be applied prospectively so as to avoid the danger of undercollections. For the reasons set forth below, we reverse the judge's decision and hold that the rates for each of Transco's three sales rate zones should be based upon fully allocated costs without regard to the settlement based differentials previously in effect.

DISCUSSION

The single issue before us is what should be the zone rate differentials on the Transco system. Upon review of the record in this proceeding, the Commission finds that rates resulting from the allocation of Transco's transmission costs to zones using the Mcf-mile method are just and reasonable

---

[5]North Carolina Utilities Commission, Atlanta Gas Light Company, and the North Carolina Companies (Piedmont Natural Gas Company, Inc., Public Service Company of North Carolina, Inc., and North Carolina Natural Gas Company).

[6]The Mcf-mile method treats a pipeline's transmission system as an integrated whole with transmission costs varying in relation to distance. It uses as the basis of cost that of the entire system, and, as the basis of allocation, the volumes of sales weighted by the distance the gas travels to each delivery point.

[7]In this proceeding Transco changed its tariffs from a volume (Mcf) basis for measurement of gas to an energy (dekatherm) basis of measurement. A dekatherm (Dth) is a thermal unit of energy equal to 1,000,000 Btu and is equivalent of one Mcf having a heating content of 1000 Btu. In this opinion we refer to both Mcf's and Dth's since not all of the data in the record are stated in dekatherms. Accordingly, references to Mcf are intended to emcompass references to Dth and, in this case, this has no effect on our disposition of the issue at hand.

and represent a proper apportionment of transmission cost responsibility between and among Transco's customers. The Commission further finds that no adequate or proper basis has been shown to justify the continued application of previously negotiated settlement rate differentials or the cost allocation methods implicit in the use of such differentials.

The Mcf-mile method is the cost allocation method which has most often been employed by the Commission for the purpose of allocating transmission costs on major long-line natural gas transmission systems such as Transco's.[8] Of all the factors which bear on this issue for a system like Transco's, distance of transmission has long been regarded as having the most constant and predictable relation to cost. In *Northern Natural,* 14 FPC 11, the FPC observed that distance of haul is a principal factor relied upon by the Interstate Commerce Commission in setting transportation rates for common carriers subject to its jurisdiction.[9] The FPC likewise concluded that distance is the primary determinant of the cost of transporting natural gas.[10] The FPC expressed its decision on this matter as follows:

> ...it is a simple economic fact that the delivery cost of natural gas increases in close proportion to the length of the transmission line of any given size. Therefore, unless other circumstances are present which outweigh the importance of the length of

[8]See *Texas Eastern Transmission Corporation,* Opinion No. 21 issued August 9, 1978, Docket No. RP74-41; *Texas Gas Transmission Corporation,* Opinion No. 792 issued April 11, 1977, Docket No. RP75-19, *vacated and remanded on other grounds Columbia Gas Transmission Corporation et al.,* Nos. 77-1627 and 77-1631 (D.C. Cir. May 17, 1979); *Southern Natural Gas Company,* Opinion No. 379, 29 FPC 323 (1963); *Tennessee Gas Transmission Company,* Opinion No. 352, 27 FPC 202 (1962); and *Northern Natural Gas Company,* Opinion No. 281, 14 FPC 11 (1955).

[9]14 FPC 11 at 23.

[10]*Id. at 24.*

> transmission required to effect delivery, the distance factor is the prime determinant of the cost of rendering service. Since in our view of this record there are no such circumstances present to counter-balance the distance factor, we conclude that the distance of transmission required to effect deliveries at the various points of sale by Northern reflects with reasonable accuracy the relative cost of providing service to its customers. (14 FPC at 24).

Thus, distance is the prime determinant of the cost of rendering transmission service unless some other factor or combination of factors can countervail the importance of the length of transmission. In this proceeding the zone 3 interests argue that factors which countervail distance include (1) historical considerations, (2) load concentration and load factor, and (3) the value of storage fields located in zone 3. We shall consider these arguments *seriatim*.

HISTORICAL FACTORS

Zone 3 witness Benson testified that the Transco system was originally certificated in 1948 to provide sales and service to the terminal zone markets in New York, New Jersey, and Pennsylvania and that the pipeline would not have been built were it not for these markets. (Tr. 277). Zone 3 argues this contribution must be recognized and considered in deciding the zone rate differential issue.

The Commission cannot agree. To give serious consideration to this non-cost factor in a rate proceeding approximately 30 years later would be inequitable and illogical. As pointed out by zone 2 witness Clay, the original certificated capacity of the line was 340,000 Mcf per day and has gone up by a factor of 8 or 9 since then. (Tr. 681; 1156). Transco's revenue requirements result from the expenses and investments associated with the facilities in service during the locked-in period involved here.[11] The cost

[11]The rates in this proceeding went into effect February 1, 1977 and remained in effect until January 1, 1978, when they were superseded by the rates filed by Transco in Docket No. RP77-108.

consequences of such facilities and their operation should be fully reflected in rates absent some countervailing consideration or policy. Zone 3's origin-of-the-system argument does not, in the Commission's judgment, provide an adequate basis for departing from the principle of cost based rates.

The staff proposed an approach which would give 50 percent weight to mileage and 50 percent weight to historical zone rate differentials. The staff was concerned, among other things, that in using a 100 percent Mcf-mile method, virtually all of Transco's rate increase would be assigned to zone 3 customers. The staff argues that its recommendation would mitigate the impact of a 100 percent Mcf-mile allocation and would give some recognition to the historical development of the system. (Tr. 119-120). However, the staff's witness later testified with reference to zone 3's historical argument that "while it makes interesting reading, I don't believe that you could apply that to the situations that exist today." (Tr. 914). The staff's primary concern appeared to be in mitigating the impact on zone 3 customers of the Mcf-mile allocation method.

Upon review of this matter, the Commission declines to give any substantial weight to historical considerations such as those cited by zone 3 interests.[12] In addition to our comments above concerning the origin of the system, we note that the historical zone rate differentials were the result of negotiated settlements among Transco and its customers. There is no persuasive evidence on this record that the historical differentials are based upon or adequately reflect cost considerations and they are impaired by that inadequacy. The FPC's prior approval of the historic zone rate differentials in the original and succeeding settlements cannot be accorded precedential weight.

As to the staff's concern for mitigating the impact of a 100 percent Mcf-mile method, we find no such mitigation is

[12]See *Texas Eastern, supra,* at 14-19, where we also rejected similar arguments.

warranted. It is not equitable, absent some significant policy consideration, to mitigate the effect of cost based rates on the zone 3 customers by imposing unjustified costs on zone 1 and zone 2 customers. Where the Commission has in prior cases modified an Mcf-mile approach by giving some weight to historical rate design, it has done so primarily to avoid unduly disrupting the pipelines' marketing patterns and ability to compete with alternate fuels. *Southern Natural Gas Company*, 29 FPC 323, 348 (1963); *Tennessee Gas Transmission Company*, 27 FPC 202, 213 (1962). No such concerns are present on this record. Approval of Transco's historical rate differentials would result in an increase in zone 3 rates of approximately $31 million or about 8 percent over present zone 3 revenues of $373 million. Under the rates resulting from Mcf-mile cost allocation, the increase to zone 3 will be approximately $46 million or about 12 percent. (Exhibit 51, Appendix A, page 7 of 10). The impact of the staff's compromise recommendation would fall roughly in between. There is no evidence that the shift in cost responsibility under the Mcf-mile method of allocation would render Transco's natural gas service in zone 3 uneconomical, that Transco would be likely to lose any of its zone 3 markets, or that its marketing patterns would be unduly disrupted. Neither Transco nor any other party makes such a claim. It is therefore clear that the rationale underlying the FPC's decision in *Southern Natural* and *Tennesee Gas* is not applicable in this case.

LOAD CONCENTRATION AND LOAD FACTOR

The zone 3 interests do not, and indeed cannot, deny the inescapable reality of distance as a significant factor in establishing zone rate differentials on a long-line system such as Transco. However, they contend that the high load concentration and load factor in the terminal zone are of such a magnitude as to offset the importance of distance in determining the cost allocation and related rate differential

issues.[13] This is so, they argue, because substantial economies of construction costs and operation expenses are experienced in cases where the pipeline's principal markets are concentrated at or near the terminus of the pipeline. (Tr. 277).

Zone 1 and zone 2 argue that load concentration should be taken into account in deciding whether or not to zone a particular system but should not be used to modify the rates resulting from the approved cost allocation method. (Tr. 681-682). As to economies of scale, zone 1 and 2 argue that such economies occur on Transco's system upstream from zone 3 where the combined loads of all 3 zones exist. (Tr. 686, and 1083-1085).

Zones 1 and 2 argue that the proper place to consider load factor is in the context of the cost classification issue which is a settled issue in this proceeding. They further note that their load factors are artifically lower now due to the effect of curtailment.

Finally, zones 1 and 2 point out that load factor and load concentration have only been given significant weight by the Commission on those systems where a mileage-weighted method of cost allocation was difficult or impossible to implement due to the characteristics of individual pipelines, particularly those which have been found to operate as a grid system rather than a long-line system.

The staff agrees with the zone 1 and zone 2 parties that curtailment has artificially affected load concentration and load factor on the Transco system, and that the effect of the

---

[13]The record reflects a load concentration of approximately 75% in the terminal zone. (Tr. 993). Zone 3 witness Benson computed the load factor for the various zones based on test year contract demand sales as follows: Zone 1 (49.89%); Zone 2 (36.12%); Zone 3 (53.35%); and system average as 48.24%. (See Tr. 281). Mr. Benson did another load factor calculation based on comparative billing demands and annual quantities of Transco's contract demand customers by zones when all sales and services (including storage and peaking services) are included on a composite basis. The results were as follows: Zone 1 (20.69%); Zone 2 (28.50%); Zone 3 (33.05%); and system average as 31.16%. (See Tr. 283).

cost classifiction methodology, which is a settled issue in this proceeding, should not be allowed to offset distance of transmission in determining the proper cost allocation method. The staff also takes the position that the judge's initial decision contravenes Commission precedent holding that distance of transmission is the primary determinant of the cost of transporting natural gas on a long-line system such as Transco. As previously noted, however, the staff would modify the Mcf-mile method solely for the purpose of softening the rate impact of that allocation.

We note at the outset that the issue of cost classification has been settled by the parties in this proceeding using the so called *United* method.[14] (Exhibit 51)

We further note that load concentration and load factor play a significant role in the establishing of zones on a particular system. However, no party has sought a change in Transco's rate zones and that question is not an issue in this proceeding.

Insofar as the issues of load concentration and load factor may be considered as bearing upon the Commission's decision in this case, the Commission is aware that in certain prior cases the FPC has cited these factors in determining cost

---

[14] *United Gas Pipe Line Company*, 50 FPC 1348 (1973) *rehearing denied* 51 FPC 1014; *aff'd sub nom Consolidated Gas Supply Corp.* v. *F.P.C.*, 172 U.S. App. D.C. 162 (1975), 520 F.2d 1176 (D.C. Cir. 1975). The *United* method designates 25 percent of the fixed transmission and storage costs and all "as billed" demand charges to the demand category and all remaining fixed costs together with all variable costs are classified to the commodity category. Costs assigned to the demand category—sometimes referred to as "demand costs"—are paid by those customers who have contracted for the right to demand a given quantity at a certain time, whether or not delivery is made. The commodity category of costs relate to costs of gas actually delivered.

We further observe that the *United* formula issue was litigated in the prior case, Opinion 801, *Transcontinental Gas Pipe Line Corporation*, FPC Docket Nos. RP74-48 and RP75-3, issued May 31, 1977, and Opinion 801-A, issued July 29, 1977. None of the parties sought judicial appeal of this issue, although other matters from those proceedings were appealed.

allocation methods and rates for other pipelines. However a careful review of these decisions reveals that where extreme variation in load size and load factor were given significant weight in the decision, other factors were present which demonstrated that the Mcf-mile method was difficult or impossible to implement in light of the physical characteristics and operations of the pipelines involved.

For example, in *Michigan Wisconsin Pipe Line Company*, 34 FPC 621 (1965), the FPC approved the allocation of costs on a system-wide basis and held that separate rate zones should not be established. Heavy load concentration (approximately 95%) and a high load factor (approximately 91%) were found in the proposed terminal zone of the system. Michigan Wisconsin also had substantial storage in the proposed terminal zone which benefited the entire system by displacement just like Transco. However, Michigan Wisconsin also had other factors which impaired the logic of giving primary emphasis to distance and the Commission gave great weight to these factors. These factors included: (1) the fact that at periods of peak demand the flow of some of the gas reversed; and (2) the fact that the system was operated as a grid with natural gas flowing into the system at divergent points and in significant amounts (over 36% of the system's supply) in the proposed terminal zone.

High load concentration (80.5%) and high load factor (almost 100%) in the terminal zone were mentioned as significant factors in *El Paso Natural Gas Company*, 22 FPC 260 (1959). But again there the Commission put heavy stress on the fact that the El Paso system was operated as a grid and therefore found "little logic"[15] in giving primary emphasis to distance. However, unlike the *Michigan Wisconsin* case, *supra*, the Commission did use zones (with differences in rates as applied to the various zones) so as to give some

---

[15] *El Paso, supra* at 278.

recognition to the distance of haul.[16]

A further example cited by zone 3 parties in support of discounting the element of distance is *Consolidated Gas Supply Corporation*, Docket Nos. RP73-107 *et al.*, Opinion No. 819, issued August 12, 1977. This case clearly does not support zone 3's argument. Here the Commission found that the maximum distance of haul was only slightly greater than the distance of haul in one zone on a long-line pipeline system, that Consolidated has supply inputs throughout its service area, and that gas flows in different directions within Consolidated's system. For these reasons the Commission found the Mcf-mile method could not be applied to Consolidated.

In contrast Transco's gas supply is introduced into the system exclusively in the Louisiana and Texas supply areas and is transported in a single direction from there north and east to the markets located along the system. Transco's system possesses none of the characteristics of a grid system, and in this respect its operations are clearly distinguishable from systems like those of *Michigan Wisconsin, El Paso*, and *Consolidated*.

In *Tennessee Gas, supra*, the FPC again stated its policy that distance of transmission is the primary cost determinant and approved the Mcf-mile method in allocating Tennessee's transmission costs. The FPC indicated, however, that the

---

[16]The Commission stated as follows:

> ...El Paso's system is an integrated one. Not only does gas pass from the Southern Division to the Northern Division, but either division, in effect, bears loads that would have to be carried by the other one. Therefore, there is little logic in computing the exact distance that gas travels from the various producing sources to the various customers. Furthermore, to attempt to determine just what gas goes to each of the several customers would lead to a result discriminatory in application and inherent with discrimination. An appropriate method of regulating this system therefore is to treat it as a unit, and in the first instance to allocate costs irrespective of the source of the gas and irrespective of the distance traveled and then if necessary, as we shall show below, provide differences in rates as applied to the various zones. (*El Paso, supra*, at 278).

distance factor might be discounted if there were an "extreme" variation in load concentration and load factor between zones.[17]

Upon review of this matter, the Commission concludes that the variations in load concentration and load factor present on this record among Transco's rate zones are not "extreme"[18] and therefore do not warrant a departure from or adjustment to the Mcf-mile method of allocation.

In reaching this decision the Commission notes that load concentration and load factor were also recently rejected as a basis for modifying the Mcf-mile cost allocations method in a similar case involving *Texas Eastern, supra,* wherein the Commission stated (mimeo p. 16):

> . . . even where there exists a concentration of high load factor sales on the downstream portion of a system, that has not necessarily discredited a mileage-related allocation of transmission costs. Thus, for example, in *Texas Gas, supra,* the FPC adopted an Mcf-mile allocation of transmission costs notwithstanding the high load factor sales existing in the northern zones of the system and the lower load factor sales in the southern zones (*Texas Gas,* at 17).

Finally, zone 3's basic argument is that the load factor and load concentration in the terminal zone result in substantial economies of scale which are of such a magnitude as to offset the importance of distance in this case.[19] We do not find this

---

[17] *Tennessee Gas, supra,* at 209.

[18] See footnote 13 *supra.*

[19] We note that delivery of gas at a high load factor improves system efficiency and reduces unit costs. This fact is explained in P. Garfield and W. Lovejoy, *Public Utilities Economics* (1964) at page 186 as follows:

> ...for a given length of pipeline, with any given load factor, the average unit transmission cost declines as the diameter of the pipeline increases. This follows from that fact that, although costs increase approximately in proportion (or a little more) with increases in diameter, the capacity increases more than proportionately; thus, for example, the capacity of a 24-inch line is about three times that of a 16-inch line.

to be the case. The record reflects (Tr. 681-682, 686, and 1083-1085) that all three zones contribute significantly to economies of scale on the Transco system. The system is designed to provide the capacity needed to service larger customers found throughout the system, with, in many instances, proportionately smaller facilities located downstream of the delivery points of such larger customers. (Tr. 682).[20]

THE VALUE OF DISPLACEMENT DUE TO THE STORAGE LOCATED IN ZONE 3

Zone 3 parties argue that the physical location of storage in the terminal zone benefits the entire system by displacement.[21] They point out that such storage makes possible the elimination of the physical back haul (displacement) of gas to zones 1 and 2 which would otherwise be necessary. They contend this contribution must be recognized and considered in deciding the zone rate differential issue.

Zone 1 and 2 interests note that Transco owns or has use of important storage fields in Louisiana, Mississippi and Pennsylvania. They do not dispute the fact that the zone 3 storage fields in Pennsylvania benefit the entire integrated Transco system by displacement. However, they state that while the availability of this storage service obviates the need

[20]For example, if requirements of the Atlanta market were not served in zone 1, and if the requirements of the North Carolina market were not served in zone 2, but rather had those markets been added to those served in the New York City metropolitan area, more facilities, resulting in substantial additional costs, would have been needed. (Tr. 682).

[21]For example, during the winter heating season, gas from the main transmission facilities is diverted to the zone 1 and zone 2 customers. This gas is replaced downstream in zone 3 with gas from storage located in zone 3. This benefits the entire integrated Transco system. It makes unnecessary the building of additional transmission facilities which would otherwise be necessary to move all of the peak day requirements from the supply areas to the market areas.

to construct additional transmission facilities (with the capacity to move all of the peak day requirements from the supply area to the market area), the present transmission facilities do fully provide the annual capacity for all gas which must be transported from the supply areas, including the gas which will be stored after transportation from the supply areas. (Tr. 683). Zone 1 and 2 further point out that the storage service rates issue is a settled issue in this proceeding and clearly should not be used to undermine a proper allocation of transmission costs to zones. (Tr. 684).

The Commission agrees with the zones 1 and 2 position on this issue. While it is true that the storage located in zone 3 makes possible the elimination of the physical back haul (displacement) of gas to zones 1 and 2, it is also true that this transportation by displacement represents no material cost. Zone 3 admits this. (Tr. 1030). Inasmuch as the record reflects no compelling or equitable reasons to deviate from cost based rates, we reject zone 3's value of service argument.

Summary Of Our Rationale In Selecting The Mcf-Mile Methodology

We reiterate the factors we have considered in reaching our decision to allocate costs on a 100 percent Mcf-mile basis:

(1) Transco is one of the major long-line natural gas transmission systems in the country. It extends all the way from the South Texas Gulf Coast all the way to the New York City metropolitan area. (Tr. 173).

(2) The gas flows in a single direction and in a unidirectional mode (the gas does not have reversed flows). The system is not operated as a grid with gas flowing into the system at divergent points and in significant amounts. The system does not have operational characteristics which would impair the logic of giving importance to the distance factor.

(3) The system's heaviest load concentration and highest load factor are in the terminal zone. However, these two factors are not of such a magnitude as to modify our conclusion that distance of transmission is the controlling

factor on a major lineal trunk transmission system like Transco.[22]

(4) The terminal zone storage benefits the entire system by displacement. However, while this displacement is very valuable to the system, there is no material cost to transportation by displacement. (Tr. 1030).

(5) The cornerstone of Commission policy on the issue of transmission cost allocation by natural gas pipelines was set forth in 1955 in *Northern Natural, supra*, where the Federal Power Commission stated:

> ...it is a simple economic fact that the delivery cost of natural gas increases in close proportion to the length of the transmission line of any given size. Therefore, unless other circumstances are present which outweigh the importance of the length of transmission required to effect delivery, the distance factor is the prime determinant of the cost of rendering service.

The record here reflects no such circumstances which would counterbalance the distance factor.

(6) In our most recent cases[23] involving the zone rate differential issue, we have reaffirmed the basic policy of *Northern Natural.*

Administrative and General Expenses

A question has arisen as to whether administrative and general expenses (A&G) allocated to the transmission function should be given mileage effect. Commission precedent on this question is conflicting. In *Southern Natural,* 29 FPC 323 (1963), the FPC gave mileage effect to allocated transmission overhead costs, thus treating these costs the same as all other transmission costs. In *Northern*

---

[22]The record (Tr. 681-682, 686, and 1083-1085) reflects, as discussed above, that all three zones contribute significantly to economies of scale on the Transco system.

[23]*Texas Gas* (Opinion 792), *Texas Eastern* (Opinion 21), and *Great Lakes Gas Transmission Company,* Opinion No. 51, issued July 30, 1979.

Natural, 14 FPC 11 (1955) and *Florida Gas Transmission Company,* 47 FPC 341 (1972), however, A&G transmission costs were not weighted by mileage.

In this proceeding the staff recommends that the A&G expenses not be given mileage effect since these costs represent only allocated portions of general overhead expenses and are not specifically mileage related. The Commission concurs with the staff's recommendation on this issue. Accordingly, in applying the Mcf-mile method of allocation, A&G expenses shall not be given any mileage effect.

Effective Date

The last remaining question concerns when the Commission's decision in this case should be made effective. The North Carolina Utilities Commission (North Carolina) and the Commission staff argue that the decision should be made effective retroactively as of February 1, 1977, the effective date of Transco's rates in Docket No. RP76-136. This decision would subject Transco to potential undercollections theoretically equal to the amount of costs shifted from zones 1 and 2 to zone 3 by this decision. This amounts to approximately $15 million annually, exclusive of interest. The undercollections would result because, under the Commission's decision, Transco's proposed rates in zones 1 and 2 would be reduced while the proposed rate in zone 3 would be increased. Transco would be required to refund the overcollections to zones 1 and 2 customers, but would be unable retroactively to collect the higher zone 3 rates.

Transco, of course, urges that the Commission's decision be made effective prospectively from the date of decision so as to avoid the problem of undercollections. The North Carolina Companies recommend a third alternative, namely that the decision should be made effective as of January 1, 1978, the effective date of Transco's succeeding general rate increase in Docket No. RP77-108.

The Commission finds on the facts of this case that this order should be made effective propsectively from the date

of decision. While the Commission is, of course, free to make the new rates effective as of the date the rates in this docket became effective, subject to refund after suspension,[24] in the Commission's judgement a retroactive application of this order has not been shown to be reasonable or necessary. To the contrary such action would, in the Commission's judgement based upon the circumstances of this case be arbitrary and grossly unfair. Determining refunds frequently involves the exercise of judgement and the Commission has discretion to consider pertinent facts and circumstances such as those discussed above in deciding whether refunds should be ordered in a particular case. *Placid Oil Co.* v. *F.P.C.*, 483 F.2d 880 (5th Cir. 1973). In this instance the Commission finds that refunds are unnecessary and unwarranted. Accordingly, this order shall be effective prospectively from the date of this decision.

The Commission orders:

(A) The presiding judge's decision, issued on December 19, 1978, is reversed.

(B) Transco's zone rates shall be determined in accordance with the terms of this order.

(C) This decision shall be effective as of the date of issuance.

(D) Within 75 days from the date of this order, Transco shall file, together with supporting statements, any necessary amendments to its rate schedules in lieu of those at issue herein, in accordance with the findings and conclusions of this decision and with the Commission's Rules and Regulations.

By the Commission.

(S E A L)

Lois D. Cashell,
Acting Secretary.

---

[24] *F.P.C.* v. *Tennessee Gas Co.*, 371 U.S. 145 (1962).

APPENDIX C

UNITED STATES COURT OF APPEALS
For the District of Columbia Circuit

No. 79-2182 **September Term, 1980**

The Public Service Commission of the
State of New York, Petitioner

v.

Federal Energy Regulatory Commission,
Respondent

Commonwealth Gas Pipeline Corp.,
Carolina Pipeline Corporation,
Transcontinental Gas Pipe Line Corporation, Intervenors

79-2183

North Carolina Natural Gas Corporation
Public Service Company of North Carolina, Inc.
Piedmont Natural Gas Company, Inc., Petitioners

v.

Federal Energy Regulatory Commission, Respondent

Carolina Pipeline Company,
Commonwealth Gas Pipeline Corporation,
Public Service Commission of the State of New York,
Transcontinental Gas Pipe Line Corp.,
Brooklyn Union Gas Co., et al.,
Columbia Gas Transmission Corp.,
Washington Gas Light Company,
Atlanta Gas Light Company, Intervenors

79-2184

North Carolina Utilities Commission, Petitioner

v.

Federal Energy Regulatory Commission, Respondent

Carolina Pipeline Company,
Commonwealth Gas Pipeline Corporation,
Public Service Commission of the
State of New York
Transcontinental Gas Pipe Line Corp.,
Brooklyn Union Gas Co., et al.,
Columbia Gas Transmission Corp.,
Washington Gas Light Company,
Atlanta Gas Light Company,
North Carolina Natural Gas Corp., et al., Intervenors

79-2195

Long Island Lighting Company, Petitioner

v.

Federal Energy Regulatory Commission, Respondent

Transcontinental Gas Pipe Line Corp.,
North Carolina Natural Gas Corp., et al.,
North Carolina Utilities Commission,
Carolina Pipeline Company,
Commonwealth Gas Pipeline Corporation,
Public Service Commission of the
State of New York,
Brooklyn Union Gas Company, et al.,
Washington Gas Light Company,
Atlanta Gas Light Company, Intervenors

79-2213

The Brooklyn Union Gas Company, et al., Petitioners

v.

Federal Energy Regulatory Commission, Respondent

Transcontinental Gas Pipe Line Corp.,
Public Service Commission of the
State of New York,

Commonwealth Gas Pipeline Corporation,
North Carolina Natural Gas Corp., et al.,
North Carolina Utilities Commission,
Washington Gas Light Company,
Atlanta Gas Light Company, Intervenors

79-2322

Transcontinental Gas Pipe Line Corporation, Petitioner

v.

Federal Energy Regulatory Commission, Respondent

Carolina Pipeline Company,
North Carolina Natural Gas Corp., et al.,
Brooklyn Union Gas Company, et al., Intervenors

PETITIONS FOR REVIEW OF ORDERS OF THE FEDERAL ENERGY REGULATORY COMMISSION

Before: McGOWAN, WILKEY and WALD, Circuit Judges

JUDGMENT

These causes came on to be heard on the petitions for review of orders of the Federal Energy Regulatory Commission and were argued by counsel. On consideration of the foregoing, it is

ORDERED AND ADJUDGED by this court, that the order of the Federal Energy Regulatory Commission on review herein which pertains to the rate of return issue is affirmed, and the order of the Commission on review herein dealing with cost allocation is set aside, all in accordance with the opinion of this Court filed herein this date.

Per Curiam
For the Court

George A. Fisher
Clerk

Date: September 24, 1980
Opinion for the Court filed by Circuit Judge McGowan.

UNITED STATES COURT OF APPEALS
For the District of Columbia Circuit

September Term, 1980

No. 79-2182

The Public Service Commission of
the State of New York,
Petitioner

v.

Federal Energy Regulatory Commission,
Respondent

Commonwealth Gas Pipeline Corp.
Carolina Pipeline Corporation,
Transcontinental Gas Pipe Line
Corporation
Intervenors

AND CONSOLIDATED CASES

Before: McGowan, Wilkey and Wald, Circuit Judges

ORDER

Upon consideraton of the petition for rehearing filed by respondent Federal Energy Regulatory Commission, it is hereby

ORDERED, by the Court, that the Opinion for the Court, filed on September 24, 1980, be amended as follows:

On page 20 of the slip opinion, strike the second paragraph and insert in lieu thereof the following:

> Transco's filing of a rate change continued to incorporate the existing zone rate differentials. Had Transco proposed any changes in them, the Commission, acting under section 4(e), could have approved the changes in whole or in part. Section 4(e), however, cannot be used by the Commission to institute any change in a ratemaking component, such as cost allocation, that does not represent at least partial approval of the change for which the enterprise had petitioned in its filing. If the Commission seeks to make such changes, it has no

alternative save compliance with the strictures of section 5(a).

FURTHER ORDERED, by the Court, that, except as the Opinion for the Court is being amended by this order, respondent Commission's petition for rehearing is denied.

Per Curiam

For the Court:

GEORGE A. FISHER
Clerk

UNITED STATES COURT OF APPEALS
For the District of Columbia Circuit

September Term, 1980

No. 79-2182

The Public Service Commission of
the State of New York
Petitioner

v.

Federal Energy Regulatory Commission,
Respondent

Commonwealth Gas Pipeline Corp.
Carolina Pipeline Corporation,
Transcontinental Gas Pipe Line
Corporation
Intervenors

AND CONSOLIDATED CASES

Before: McGowan, Wilkey and Wald, Circuit Judges

ORDER

Upon consideration of the petitions for rehearing filed by petitioner Transcontinental Gas Pipe Line Corporation, North Carolina Natural Gas Corporation, et al., and North Carolina Utilities Commission, and of the petition for rehearing filed by intervenor Atlanta Gas Light Company, it is

ORDERED, by the Court, that the aforesaid petitions for rehearing are denied.

Per Curiam

For the Court:

GEORGE A. FISHER
Clerk

§ 717c. Rates and charges; schedules; suspension of new rates.

(a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is declared to be unlawful.

(b) No natural-gas company shall, with respect to any transportation or sale of natural gas subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.

(c) Under such rules and regulations as the Commission may prescribe, every natural-gas company shall file with the Commission, within such time (not less than sixty days from June 21, 1938) and in such form as the Commission may designate, and shall keep open in convenient form and place for public inspection, schedules showing all rates and charges for any transportation or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services.

(d) Unless the Commission otherwise orders, no change shall be made by any natural-gas company in any such rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto, except after thirty days' notice to the Commission and to the public. Such notice shall be given by filing with the Commission and keeping open for public inspection new schedules stating plainly the change

or changes to be made in the schedule or schedules then in force and the time when the change or changes will go into effect. The Commission, for good cause shown, may allow changes to take effect without requiring the thirty days' notice herein provided for by an order specifying the changes so to be made and the time when they shall take effect and the manner in which they shall be filed and published.

(e) Whenever any such new schedule is filed the Commission shall have authority, either upon complaint of any State, municipality, State commission or gas distributing company, or upon its own initiative without complaint, at once, and if it so orders, without answer or formal pleading by the natural-gas company, but upon reasonable notice, to enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service; and, pending such hearing and the decision thereon, the Commission, upon filing with such schedules and delivering to the natural-gas company affected thereby a statement in writing of its reasons for such suspension, may suspend the operation of such schedule and defer the use of such rate, charge, classification, or service, but not for a longer period than five months beyond the time when it would otherwise go into effect; and after full hearings, either completed before or after the rate, charge, classification, or service goes into effect, the Commission may make such orders with reference thereto as would be proper in a proceeding initiated after it had become effective. If the proceeding has not been concluded and an order made at the expiration of the suspension period, on motion of the natural-gas company making the filing, the proposed change of rate, charge, classification, or service shall go into effect. Where increased rates or charges are thus made effective, the Commission may, by order, require the natural-gas company to furnish a bond, to be approved by the Commission, to refund any amounts ordered by the Commission, to keep accurate accounts in detail of all amounts received by reason of such increase, specifying by

whom and in whose behalf such amounts were paid, and, upon completion of the hearing and decision, to order such natural-gas company to refund, with interest, the portion of such increased rates or charges by its decision found not justified. At any hearing involving a rate or charge sought to be increased, the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the natural-gas company, and the Commission shall give to the hearing and decision of such questions preference over other questions pending before it and decide the same as speedily as possible.

June 21, 1938, c. 556 § 4, 52 Stat. 822; May 21, 1962, Pub.L. 87454, 76 Stat. 72.

§ 717d. Fixing rates and charges; determination of cost of production or transportation

(a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however,* that the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

(b) The Commission upon its own motion, or upon the request of any State Commission, whenever it can do so without prejudice to the efficient and proper conduct of its affairs, may investigate and determine the cost of the production or transportation of natural gas by a natural-gas company in cases where the Commission has no authority to establish a rate governing the transportation or sale of such natural gas.

June 21, 1938, c. 556, § 5,52 Stat. 823.

§ 554. Adjudications

(a) This section applies, according to the provisions thereof, in every case of adjudication required by statute to be determined on the record after opportunity for an agency hearing, except to the extent that there is involved—

(1) a matter subject to a subsequent trial of the law and the facts de novo in a court;

(2) the selection or tenure of an employee, except a hearing examiner appointed under section 3105 of this title;

(3) proceedings in which decisions rest solely on inspections, tests, or elections;

(4) the conduct of military or foreign affairs functions;

(5) cases in which an agency is acting as an agent for a court; or

(6) the certification of worker representatives.

(b) Persons entitled to notice of an agency hearing shall be timely informed of—

(1) the time, place, and nature of the hearing;

(2) the legal authority and jurisdiction under which the hearing is to be held; and

(3) the matters of fact and law asserted.

When private persons are the moving parties, other parties to the proceeding shall give prompt notice of issues controverted in fact or law; and in other instances agencies may by rule require responsive pleading. In fixing the time and place for hearings, due regard shall be had for the convenience and necessity of the parties or their representatives.

(c) The agency shall give all interested parties opportunity for—

(1) the submission and consideration of facts, arguments, offers of settlement, or proposals of adjustment when time, the nature of the proceeding, and the public interest permit; and

(2) to the extent that the parties are unable so to determine a controversy by consent, hearing and decision on notice and in accordance with sections 556 and 557 of this title.

(d) The employee who presides at the reception of evidence pursuant to section 556 of this title shall make the recommended decision or initial decision required by section 557 of this title, unless he becomes unavailable to the agency. Except to the extent required for the disposition of ex parte matters as authorized by law, such an employee may not—

(1) consult a person or party on a fact in issue, unless on notice and opportunity for all parties to participate; or

(2) be responsible to or subject to the supervision or direction of an employee or agent engaged in the performance of investigative or prosecuting functions for an agency.

An employee or agent engaged in the performance of investigative or prosecuting functions for an agency in a case may not, in that or a factually related case, participate or advise in the decision, recommended decision, or agency review pursuant to section 557 of this title, except as witness or counsel in public proceedings. This subsection does not apply—

(A) in determining applications for initial licenses;

(B) to proceedings, involving the validity or application of rates, facilities, or practices of public utilities or carriers; or

(C) to the agency or a member or members of the body comprising the agency.

(e) The agency, with like effect as in the case of other orders, and in its sound discretion, may issue a declaratory order to terminate a controversy or remove uncertainty.

Pub.L. 89-554, Sept. 6, 1966, 80 Stat. 384.